

REMARKS

Entry and consideration of the following remarks are respectfully requested.

Claims 1-67 are pending. Claims 1-48, 55-58, and 61-63 have been withdrawn by Examiner as being drawn to a non-elected invention. Claims 49-54, 59-60 and 64-67 are under examination.

Claims 53-54 and 58-60 stand objected to as allegedly of improper dependent form for failing to limit the subject matter of a previous claim. These claims have been amended per Examiner's kind suggestion. Withdrawal of the objection is respectfully requested.

Claims 64-67 stand rejected under 35 USC §112, first paragraph as allegedly containing subject matter which was not described due to lack of deposit information. Applicants request that this rejection be held in abeyance until claims are allowed at which time the proper deposit will be made.

Claims 49-54, and 59-60 stand rejected under 35 USC §102(b) as allegedly anticipated by DeShazer et al. This rejection is traversed in view of the following.

The claimed invention is for a mutant strain with an altered ability to express the protein BmaI3, or where the function of BmaI3 is altered. BmaI3 is a *B. mallei* protein, a synthase enzyme which functions in the synthesis of n-acyl-homoserine lactones. N-acyl-homoserine lactones are

signaling molecules which are part of the quorum sensing system of the bacteria.

The inventors also discovered that a strain with altered expression or function of the enzyme BmaI3, is avirulent and can be used as a glanders vaccine. DeShazer do not discuss BmaI3, nor an enzyme similar to BmaI3, nor a strain with altered BmaI3 expression or function. DeShazer identify a *B. mallei* polysaccharide gene cluster and produce strains harboring mutations in these genes involved in polysaccharide biosynthesis.

As Examiner suggests in his Action on page 6, 4<sup>th</sup> paragraph, "although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims", therefore, since "fragments thereof" is not a limitation of the claims as presented, it cannot be read as part of the claims. In addition, Examiner's discussion of fragments of the gene *bmai3* being similar to fragments of genes expressed in DeShazer is not relevant to the claimed invention. The mutant strain was not previously known nor anticipated since the protein BmaI3, or its function, was not previously known. None of the mutant strains in DeShazer had an alteration in expression and function of BmaI3. Therefore, the reference does not contain nor describes the subject matter claimed, and hence does not anticipate the claimed invention. Reconsideration and withdrawal of the rejection is respectfully requested.

In re Application of: Ulrich et al.  
Serial no. 10/620,242

All objections and rejections have been addressed.  
This application is in condition for allowance and Notice  
to that effect is respectfully solicited.

Respectfully submitted,

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